

AMENDMENTS TO THE CLAIMS

1-4. Canceled.

5. (currently amended) A segmented annular mold for forming a tread belt having a reinforcing belt structure having a radial thickness (t), the mold comprising: a plurality of radially movable inner segments for forming the inner surface of the tread belt; holding means for maintaining the inner segments at relatively constant dimension during molding, wherein the holding means further includes a slidable hub assembly, wherein the slidable hub assembly further includes a central shaft, an upper hub portion and a lower hub portion each slidably mounted onto the central shaft; and each upper and lower hub portions having a plurality of linkage arms pivotably connected to the respective hub portion and the radially inner segments, and
a plurality of radially movable outer mold segments for forming the outer tread belt surface wherein the radially inner and radially outer segments form a mold parting line.

6. (previously presented) A segmented annular mold for forming a tread belt comprising:

a plurality of outer tread belt forming segments;

a plurality of radially movable and outwardly expandable inner segments for forming the inner surface of the tread belt;

a slidable hub assembly, the slidable hub assembly having a central shaft, an upper hub portion and a lower hub portion each slidably mounted onto the central shaft; each upper and lower hub portions having a plurality of linkage arms pivotably connected to the respective hub portion and the radially inner segments, each circumferentially adjacent inner segment being connected to either the upper or lower hub portion in an alternating pattern, the movement of one of the hub portions relative to the other hub portion being independently actuated by one or more means for moving the hub portions, and wherein the movement of the lower and upper hub portions into interlocking alignment moves the inner segments to form an annular ring.

7. (previously presented) The segmented annular mold for forming a tread belt of claim 6 further comprising:

a plurality of split J frames, one split J frame for supporting each outer tread belt forming segment.

8. (previously presented) The segmented mold for forming a tread belt of claim 7, further comprises:

a base plate support attached to each split J frame;

a plurality of linear bearing rails and bearing blocks, the bearing blocks being attached to the inner and outer segments, a pair of the linear bearing rails providing linear guides for the segments.

9. (previously presented) The segmented mold for forming an annular tread belt of claim 8 further comprises:

a cooling plate interposed between each segment and the linear bearing blocks attached to the respective segment.

10. (original) The segmented mold for forming a tread belt of claim 9 wherein the cooling plate has a plurality of passages for passing a coolant medium.

11. (withdrawn) A method of molding an annular tread belt comprises the steps of:

providing an open segmented annular mold for receiving and forming a tread belt having a reinforcing belt structure having a radial thickness (t), the mold having a plurality of radially movable and outwardly expandable inner segments for forming the inner surface of the tread belt and a plurality of radially movable and contracting outer segments for forming the outer tread belt surface wherein the radially inner and radially outer segments form a mold parting line at a location radially outward of a midpoint of the belt reinforcing structure of the tread belt at a location greater than 50% (t) as measured from the radially innermost surface of the belt reinforcing structure;

inserting a tread belt into the open mold;

closing the mold; and

curing the tread belt.

12-15. Canceled

16. (previously presented) A segmented annular mold for forming a tread belt comprising:

- a plurality of outer tread belt forming segments;
- a plurality of radially movable and outwardly expandable inner segments for forming the inner surface of the tread belt;
- a slidable hub assembly, the slidable hub assembly having a central shaft, an upper hub portion and a lower hub portion each slidably mounted onto the central shaft; wherein the hub portions are connected to the inner segments.

17. (previously presented) The segmented mold of claim 16 wherein each upper and lower hub portions having a plurality of linkage arms pivotably connected to the respective hub portion and the radially inner segments.

18. (previously presented) The segmented mold of claim 17 wherein each circumferentially adjacent inner segment is connected to either the upper or lower hub portion in an alternating pattern.

19. (previously presented) The segmented mold of claim 18 wherein the movement of one of the hub portions relative to the other hub portion being independently actuated by one or more means for moving the hub portions, and wherein the movement of the lower and upper hub portions into interlocking alignment moves the inner segments to form an annular ring.

This listing of claims will replace all prior versions and listings of claims in the application.